

Technical training.
Product information.

F01/F02 LCI General Vehicle Electronics



BMW Service

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General information

Symbols used

The following symbol/schematic diagram is used in this document to facilitate better comprehension or to draw attention to very important information:



Contains important safety information and information that needs to be observed strictly in order to guarantee the smooth operation of the system.

Information status and national-market versions

BMW Group vehicles meet the requirements of the highest safety and quality standards. Changes in requirements for environmental protection, customer benefits and design render necessary continuous development of systems and components. Consequently, there may be discrepancies between the contents of this document and the vehicles available in the training course.

This document basically relates to the European version of left-hand drive vehicles. Some operating elements or components are arranged differently in right-hand drive vehicles than shown in the graphics in this document. Further deviations may arise as a result of the equipment specification in specific markets or countries.

Additional sources of information

Further information on the individual topics can be found in the following:

- Owner's Handbook
- Integrated Service Technical Application.

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The information contained in this document forms an integral element of the technical training of the BMW Group and is intended for the trainer and participants in the seminar. Refer to the current respective information systems of the BMW Group for any changes/additions to the technical data.

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VH-23/International Technical Training

F01/F02 LCI General Vehicle Electronics

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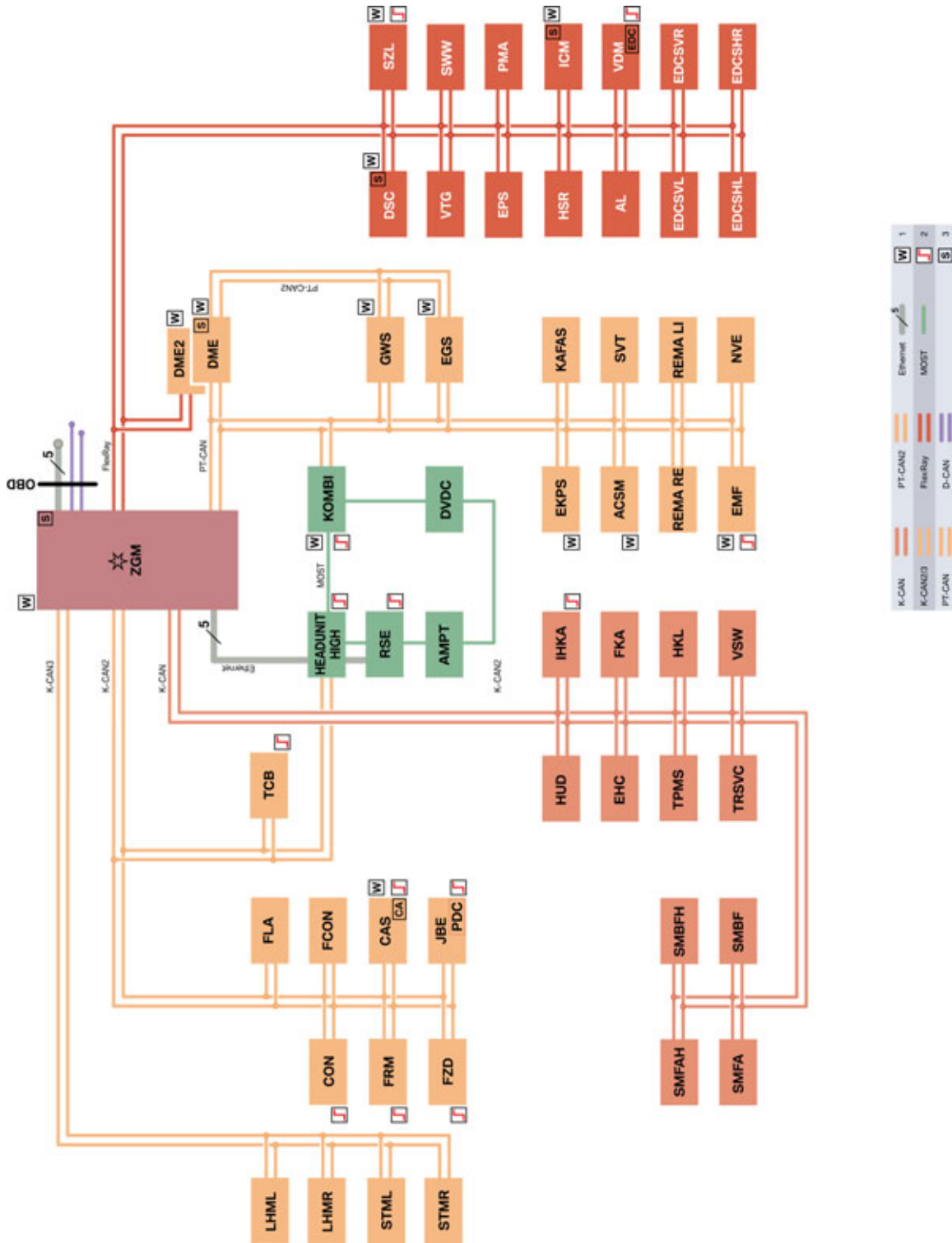
1. Introduction

This product information provides an overview of the key new features in the vehicle electrical system with the model revision of the F01/F02.

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2. Electrical System

2.1. F01/F02 LCI bus overview



F01/F02 LCI bus overview

TE12-0199_2

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2. Electrical System

Index	Explanation
1	Control units with wake-up line
2	Control units authorized to perform wake-up function
3	Start-up node, control units for starting and synchronizing the FlexRay bus system
ACSM	Advanced Crash Safety Module
AL	Active steering
AMPT	Top HiFi amplifier
CA	Car Access
CAS	Car Access System
CON	Controller
DME	Digital Engine Electronics
DME2	Digital Engine Electronics 2
DSC	Dynamic Stability Control
DVDC	DVD changer
EDC	Electronic Damper Control
EDCSHL	Electronic Damper Control satellite, rear left
EDCSHR	Electronic Damper Control satellite, rear right
EDCSVL	Electronic Damper Control satellite, front left
EDCSVR	Electronic Damper Control satellite, front right
EGS	Electronic transmission control
EHC	Electronic ride height control
EKPS	Electronic fuel pump control
EMF	Electromechanical parking brake
EPS	Electronic Power Steering (electromechanical power steering)
FCON	Rear compartment controller
FKA	Rear climate control
FLA	High-beam assistant
FRM	Footwell module
FZD	Roof function center
GWS	Gear selector switch
HEADUNIT HIGH	Headunit High (now incorporates most Combox functions except telematics)
HKL	Automatic operation of trunk lid
HSR	Rear axle slip angle control
HUD	Head-Up Display
ICM	Integrated Chassis Management

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2. Electrical System

Index	Explanation
IHKA	Integrated automatic heating / air-conditioning system
JBE	Junction box electronics
KAFAS	Camera-based driver support systems
KOMBI	Instrument panel/Multifunctional instrument display
LHML	LED main light module, left
LHMR	LED main light module, right
NVE	Night Vision Electronics
PDC	Park Distance Control
PMA	Parking Maneuvering Assistant
REMA LI	Reversible electric-driven reel, left
REMA RE	Reversible electric-driven reel, right
RSE	Rear seat entertainment system
SMBF	Front passenger seat module
SMBFH	Rear passenger seat module
SMFA	Driver's seat module
SMFAH	Rear driver's side seat module
STML	Headlight driver module, left
STMR	Headlight driver module, right
SVT	Servotronic
SWW	Lane change warning
SZL	Steering column switch cluster
TPMS	Tire Pressure Monitoring System
TCB	Telematic Communication Box (replaced the Combox telematics functions)
VDM	Vertical Dynamics Management
VSW	Video switch
VTG	Transfer case (xDrive only)
ZGM	Central gateway module

As part of the model revision of the F01/F02 some adaptations were made to the vehicle electrical system. Similar to the other current BMW models, the F01/F02 LCI central information display (CID) now is connected to the APIX line and thus has no bus connection. For vehicles with a rear seat entertainment system this is the first time the two rear monitors are also connected to the APIX line instead of a bus connection.

The F01/F02 LCI vehicle electrical system has been enhanced with the addition of the K-CAN3 bus system. This is used for the realization of the illumination functions, among other things. More information on this bus system can be found in the "Exterior Lights" chapter in this training manual.

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2. Electrical System

The US version F01/F02 LCI is available with “Navigation Professional” Headunit High as standard equipment. The Headunit High telematics functions are made available by the new Telematic Communication Box (TCB) control unit. The other “media” functions, which were previously provided by the Combox, are now directly integrated into the Headunit High. More information on these two control units can be found in the ST1211 Headunit High training material available on TIS and ICP.

2.1.1. Reversible electromotive automatic reel (REMA LI and REMA RE)

Reversible electromotive automatic reels have been introduced to the US market (for the first time) in the F01/F02 LCI vehicles as part of the standard Active Protection (5AL) system. The REMA RE and REMA LI control units are installed on both front seat belts and are an essential component of the new Pre-Crash/Post-Crash functions of the Active Protection system.

After fastening the seat belt the reversible electromotive reel reduces the belt slack as soon as the driver drives off past 10 km/h (6 mph). Removing the belt slack guarantees that the seat belt is secured to the driver or front passenger and thus a better restraining effect can be achieved in the event of an accident.

Another advantage of the reversible electromotive reel is the tensioning of the belt before a possible accident with increased retracting force. This reduces the possibility of the passenger slipping out of the belt (also called "submarining").

For more information regarding (5AL) Active Protection system please refer to the “Passive Safety” section of this training material.

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3. Voltage Supply

3.1. Battery Guard

The Battery Guard function (already known from the F30) detects critical states of charge which could jeopardize engine starting and sends the relevant information to the BMW Service authorized workshop which in turn contacts the customer to schedule a service visit.

BMW Assist with enhanced Bluetooth and USB (option 6NL) and an active BMW ConnectedDrive agreement are required for the Battery Guard function which are standard in all F01/F02 LCI vehicles.

The BMW TeleServices Battery Guard Call is automatically activated by the vehicle under the following conditions:

- If the battery voltage reaches the bottom of the starting ability limit because a bus wake-up signal is present, sleep mode is prevented or there is a standby current violation the BMW TeleServices Battery Guard informs the BMW Service authorized workshop in defined cases at the next vehicle start-up (terminal 15 ACTIVE). It can then proactively contact the customer and arrange a service appointment to eliminate the cause.

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4. Comfort Access

The Comfort Access function is integrated in the Car Access System (CAS) control unit in the F01/F02 LCI.

Comfort Access contains the following functions:

- **Passive Entry (access authorization)**
facilitates access to the vehicle without active use of the ID transmitter
- **Passive Go (drive authorization)**
enables the vehicle to be started when there is a valid ID transmitter in the passenger compartment
- **Passive Exit (locking authorization)**
enables the vehicle to be locked without active use of the ID transmitter
- **Convenience trunk opening**
makes possible **hands free** opening of the trunk lid by simply moving a foot under the rear bumper.

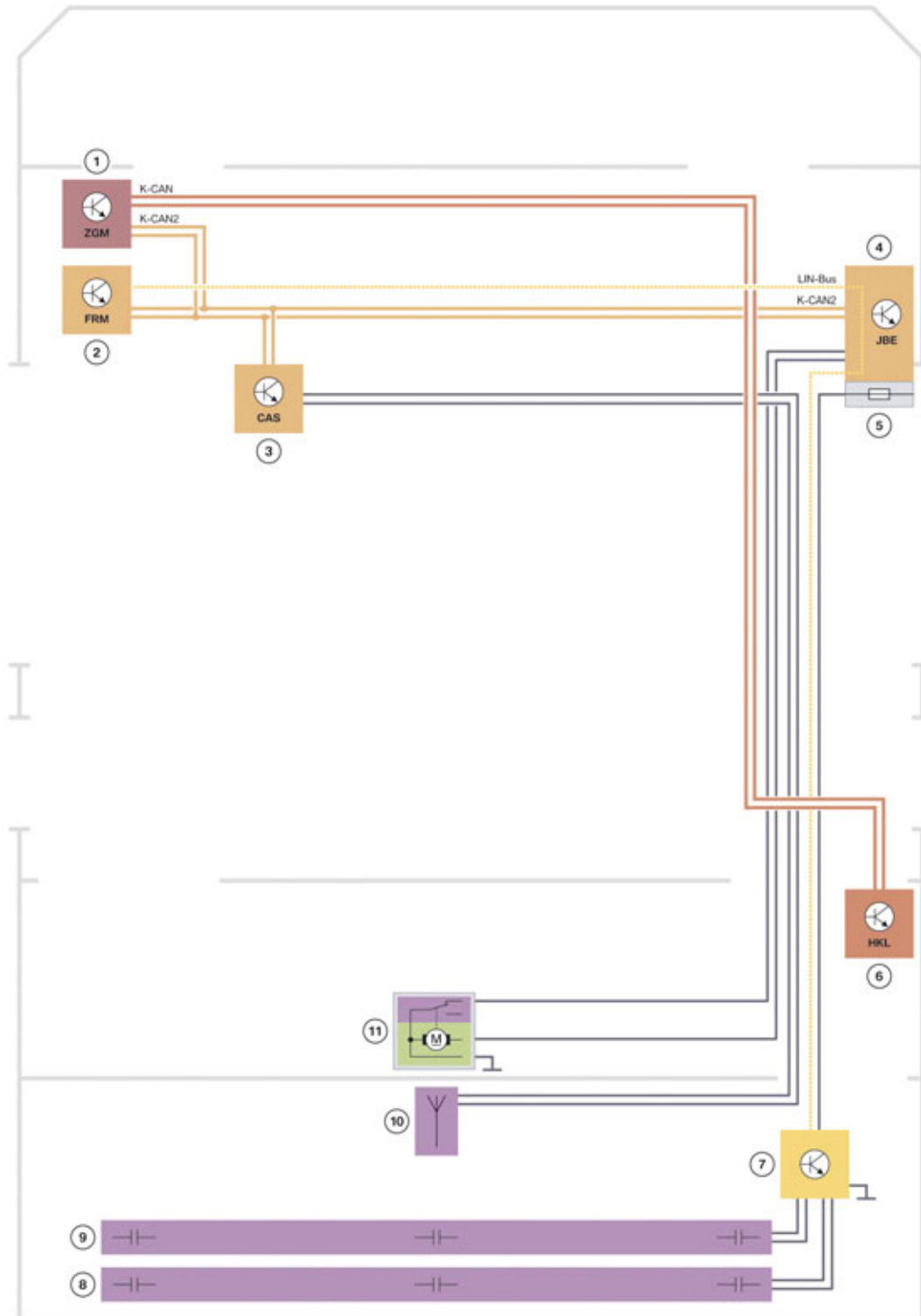
The components and functionality of Comfort Access are familiar from the current BMW models.

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4. Comfort Access

4.1. Convenience trunk opener

4.1.1. System wiring diagram



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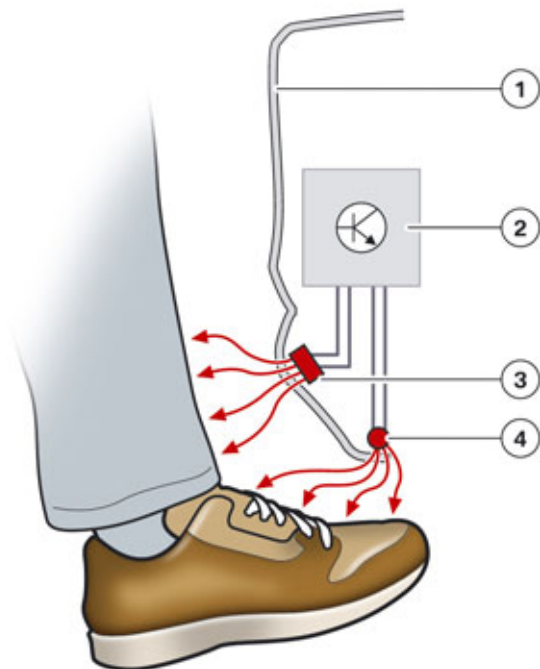
F01/F02 LCI General Vehicle Electronics

4. Comfort Access

Index	Explanation
1	Central gateway module (ZGM)
2	Footwell module (FRM)
3	Car Access System (CAS)
4	Junction box electronics (JBE)
5	Power distribution box, front
6	Automatic operation of trunk
7	Control unit for convenience trunk opener
8	Sensor at top for convenience trunk opener
9	Sensor at bottom for convenience trunk opener
10	Comfort Access antenna, bumper, rear
11	trunk lid lock

4.1.2. Functional description

The hands free trunk lid opening function operation is done by means of targeted foot movements to and from the bumper. Two sensors detect the movement via capacitive measurements.



Hands free trunk opening by foot movement

TE11-1161

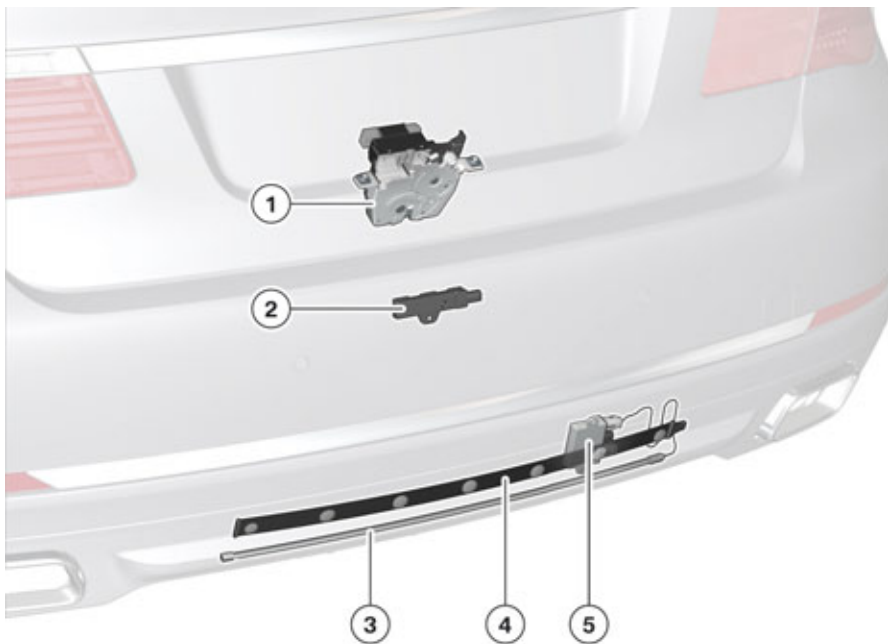
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4. Comfort Access

Index	Explanation
1	Rear bumper
2	Control unit for convenience trunk opener
3	Sensor at top for convenience trunk opener
4	Sensor at bottom for convenience trunk opener

The following components are involved in the function:

- Footwell module (FRM)
- Junction box electronics (JBE)
- trunk lid lock
- Control unit for convenience trunk opener
- Comfort Access antenna, bumper, rear
- Two sensors.



F01/F02 LCI sensor for convenience trunk opener

Index	Explanation
1	Trunk lid lock
2	Control unit for convenience trunk opener
3	Sensor at bottom for convenience trunk opener
4	Sensor at top for convenience trunk opener
5	Comfort Access antenna, bumper, rear

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4. Comfort Access

The two sensors are connected to the evaluation electronics and constantly measure the capacitance. A comparison of the time characteristic of the measured capacities permits the identification of a certain movement pattern.

A targeted foot movement to and from the bumper is detected as the top sensor detects the shin, the bottom sensor the toes.

The detection range is between the rear lights and is highlighted by a chrome trim strip on the rear bumper.

The sensors are secured in the inside of the rear bumper.

The evaluation electronics evaluate the signals from the sensors and make this information available to the footwell module and the junction box electronics via the local interconnect network (LIN) bus. If a valid ID transmitter is located in the vicinity of the Comfort Access antenna in the rear bumper, the junction box electronics activates the opening of the trunk lid.

The trunk opens regardless if it was locked or unlocked.

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5. Exterior Lights

The exterior lights are adapted to market requirements and utilize the latest technology accordingly. The F01 already impressive available options have been enhanced and supplemented with new features.



TE12-0457

F01/F02 LCI exterior lights at front with adaptive LED headlight

Index	Explanation
1	Turn indicator in exterior mirror
2	Bi-xenon headlight with Adaptive Headlight (standard) Adaptive LED headlight (optional equipment 552, standard on 760Li)
3	LED fog light (standard)

The additional turn indicators of the front fenders have been discontinued and are now integrated into the exterior mirrors.

The design of the bi-xenon headlight has been modified. The side lights and the daytime driving lights are now realized by LEDs. The LEDs can be operated in two power stages. If they are activated at full power, they are daytime driving lights. The side lights roughly 10 % of their power is dimmed.

The standard bi-xenon Adaptive Headlight have a new design.

The exterior lights are supplemented with the LED fog lights as standard equipment (5A1) and the new adaptive LED headlights (optional equipment 552 on all models but the 760Li).

The new adaptive LED headlights are unique and are primarily distinguished from the LED headlights of other BMW models by their appearance.

In the F01/F02 LCI (for the first time) the low-beam headlight and the daytime driving lights are both realized via LED arrays. The LED arrays replace the previous corona ring design. This results in a typical and unmistakable appearance of the vehicle which is noticeable during the day and at night.

The activation of the new bi-xenon headlights with Adaptive Headlight (standard) or the new adaptive LED headlights (optional equipment 552) is realized for the first time using an additional quick body Controller Area Network bus (K-CAN3). In this bus topology the standard LIN bus is still used for the activation of the stepper motors in the headlights and for the transmission of the reduced fault and di-

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5. Exterior Lights

agnosis information to the stepper motors. In contrast to the previous activation, the footwell module no longer addresses individual light sources, but conveys lighting functions via the new K-CAN3 data bus. This request is then implemented accordingly in the headlight control units. All headlight control units are individually supplied with voltage from the junction box power distribution box or from the luggage compartment power distribution box.

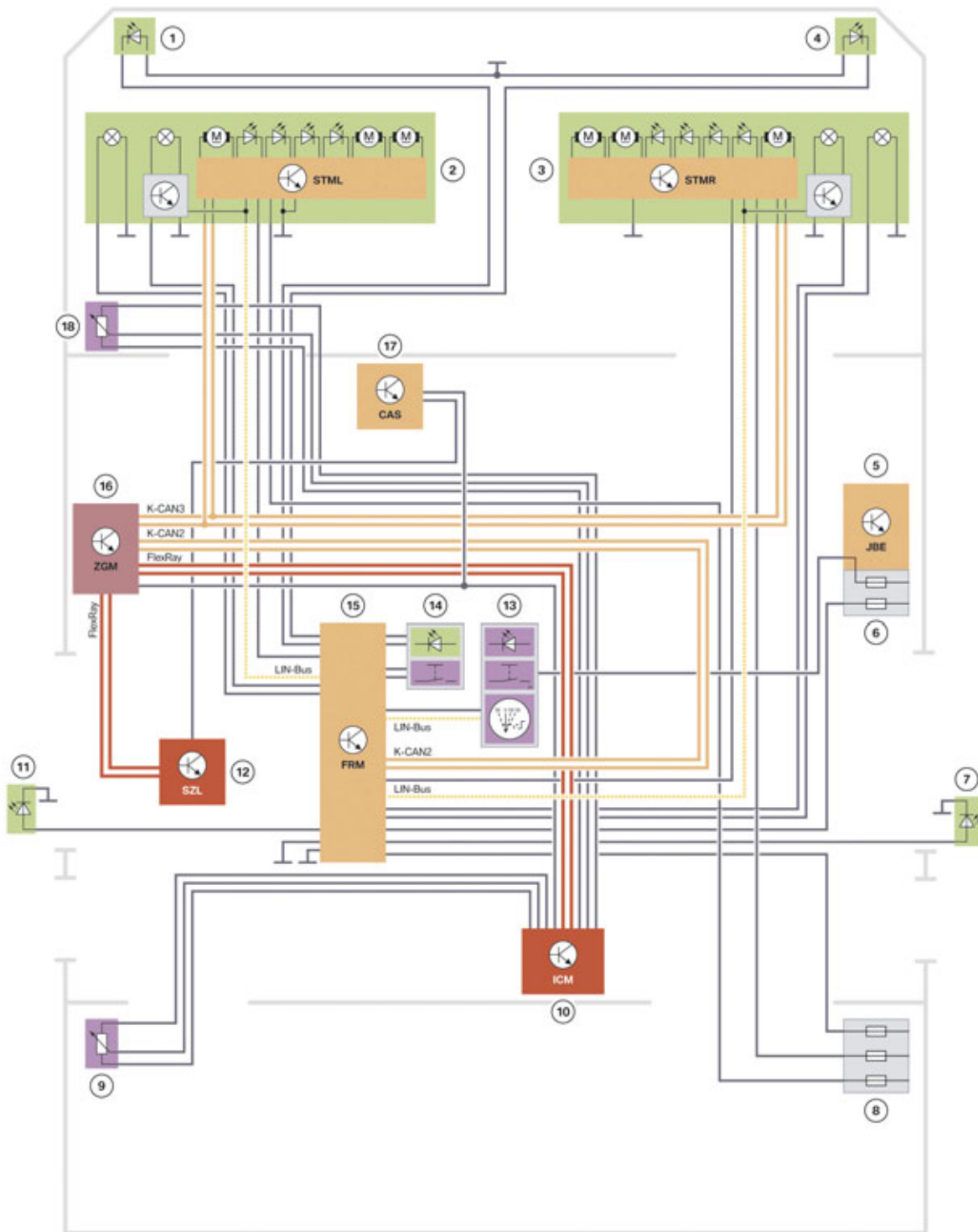
The high-beam assistant optional Automatic High-beams 5AC (standard on 760Li) is in conjunction with the LED headlight (option 552) and is offered in the ZLP Lighting Package.

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5. Exterior Lights

5.1. System wiring diagrams

5.1.1. Bi-xenon headlights and Adaptive Headlight (standard)



TE12-0065

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5. Exterior Lights

Index	Explanation
1	Left LED fog light (standard)
2*	Left headlight with the cornering light, the stepper motors for the Adaptive Headlight and the LEDs for side lights/daytime driving lights, the side marker light, the turn indicator and the positioning light
3*	Right headlight with the cornering light, the stepper motors for the Adaptive Headlight and the LEDs for side lights/daytime driving lights, the side marker light, the turn indicator and the positioning light
4	Right LED fog light (standard equipment 5A1)
5	Junction box electronics (JBE)
6	Power distribution box, junction box
7	Additional turn indicator in exterior mirror, right
8	Power distribution box, luggage compartment
9	Ride height sensor, rear
10	Integrated Chassis Management (ICM)
11	Additional turn indicator in exterior mirror, left
12	Steering column switch cluster (SZL)
13	Operating facility, light switch
14	Central locking button/hazard warning switch
15	Footwell module (FRM)
16	Central gateway module (ZGM)
17	Car Access System (CAS)
18	Ride height sensor, front

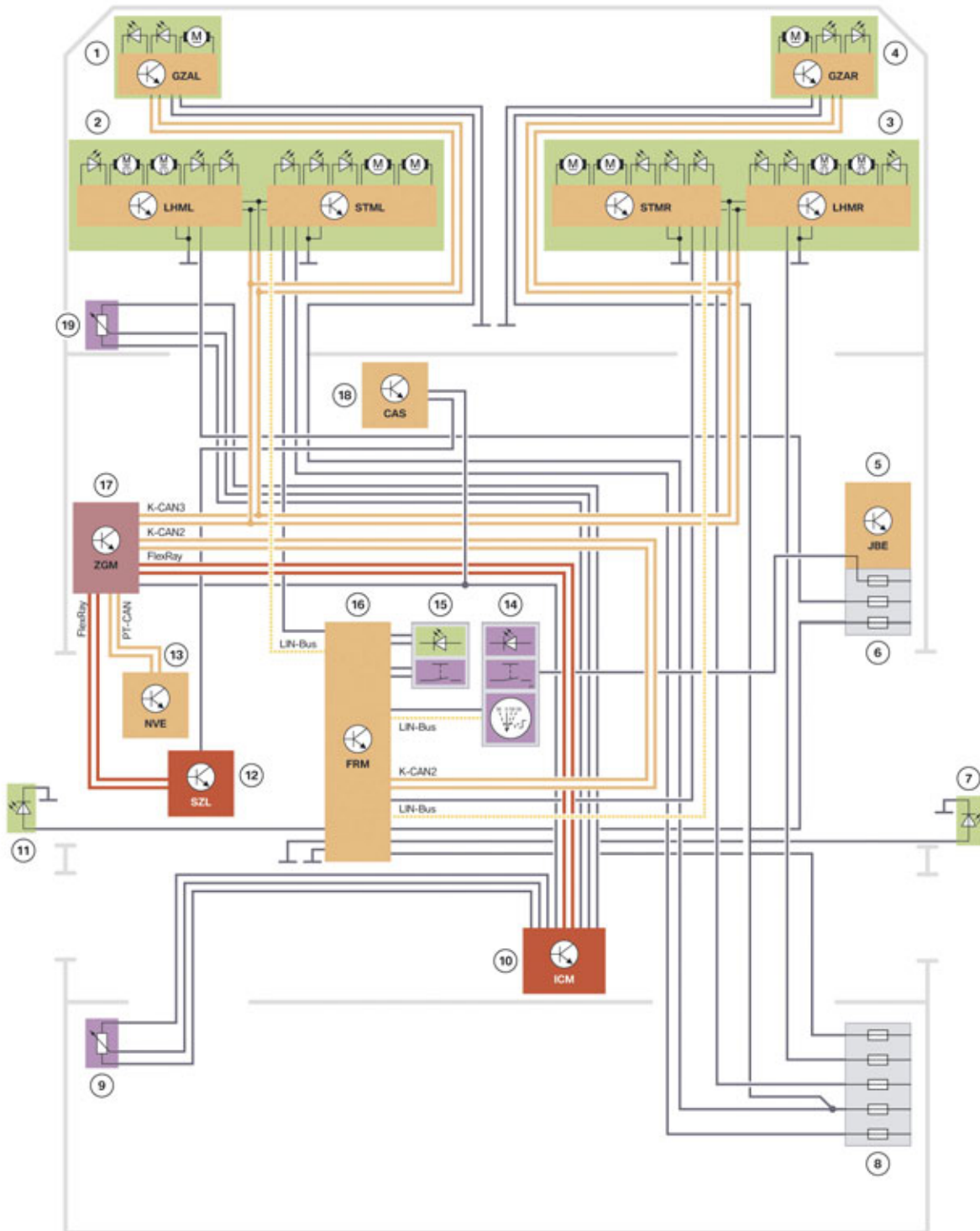
*** Not all components shown on the headlight graphic are available in the US market.**

Note: The pervious diagram shows the activation of the LED fog lights for the US market.

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5. Exterior Lights

5.1.2. Adaptive LED headlights (optional equipment SA552)



TE12-0066

F01/F02 LCI system wiring diagram for Adaptive LED headlight (optional equipment 552)

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5. Exterior Lights

Index	Explanation
1	Left LED fog light (standard) ¹
2	Left headlight with the LED main light module LHML (fan and LEDs for the cornering light, low-beam and high-beam headlights) and the headlight driver module STML (stepper motors and LEDs for the side marker light, the positioning light and the turn indicator)
3	Right headlight with the LED main light module LHMR (fan and LEDs for the cornering light, low-beam and high-beam headlights) and the headlight driver module STMR (stepper motors and LEDs for the side marker light, the positioning light and the turn indicator)
4	Right LED fog light (standard) ¹
5	Junction box electronics (JBE)
6	Power distribution box, junction box
7	Additional turn indicator in exterior mirror, right
8	Power distribution box, luggage compartment
9	Ride height sensor, rear
10	Integrated Chassis Management (ICM)
11	Additional turn indicator in exterior mirror, left
12	Steering column switch cluster (SZL)
13	Control unit for night vision electronics (NVE) (only with option 5A3, Not available in the US)
14	Operating facility, light switch
15	Central locking button/hazard warning switch
16	Footwell module (FRM)
17	Central gateway module (ZGM)
18	Car Access System (CAS)
19	Ride height sensor, front

¹ The diagram shows the activation of the headlights for targeted illumination (**option 5A3 is not available in the US**).

Note: The activation of the LED fog light (standard equipment 5A1) is different and is described in the "Bi-xenon headlights and Adaptive Headlight (standard equipment 524)" chapter.

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5. Exterior Lights

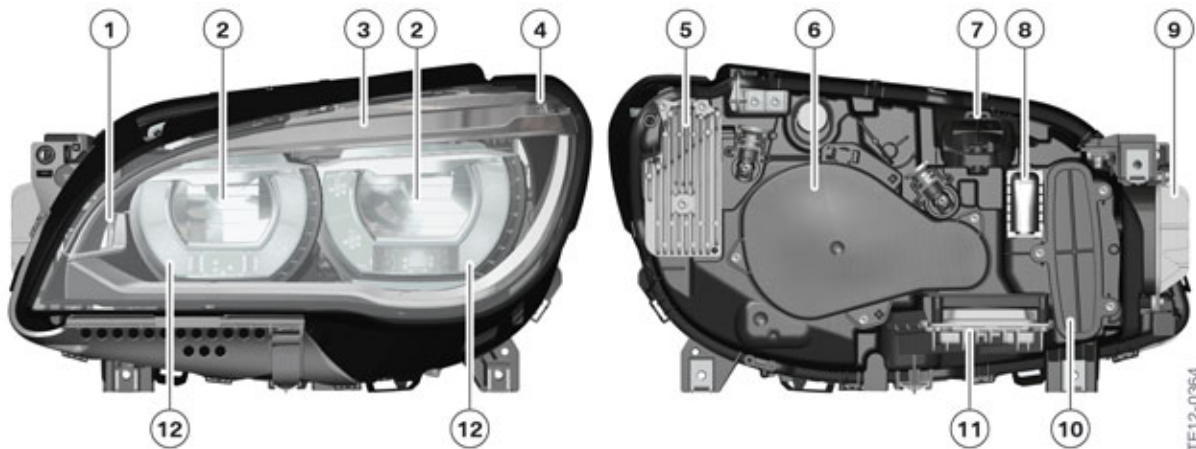
5.2. LED headlight



F01/F02 LCI adaptive LED headlight

The new optional equipment adaptive LED headlights (552) in the F01/F02 LCI are unique because for the first time both the low-beam headlight and the daytime driving lights are realized via LED arrays. The LED arrays replace the corona rings of the previous system and are significantly wider. The double rings are thus not only noticed during the day, but also at nighttime. This new feature supports the typical and unmistakable appearance of the vehicle.

The following graphic shows the components of the LED headlight.



F01/F02 LCI components of the LED headlight

Index	Explanation
1	Cornering light
2	High-beam headlight and headlight flasher
3	Turn indicator and positioning light/side lights
4	Side marker light
5	LED module for turn indicator and positioning light/side lights
6	Rear cover (outer fan, stepper motors)
7	Cover at top (inner fan)
8	12-pin electrical plug connection

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5. Exterior Lights

Index	Explanation
9	Cornering light LED module
10	Headlight driver module (STML / STMR)
11	LED main light module (LHML / LHMR)
12	Low-beam headlight/Daytime driving lights

5.2.1. Lighting functions

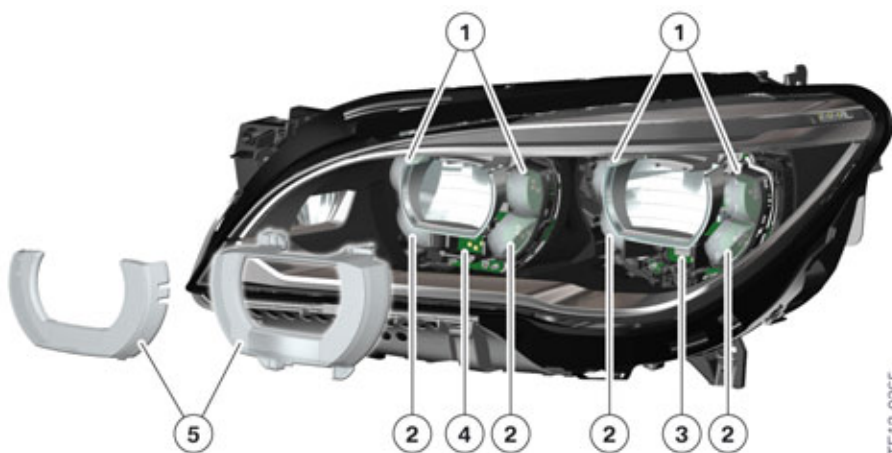
Low-beam headlight



TE12-0471

F01/F02 LCI low-beam headlight of the LED headlight

Unlike the high-beam headlight and the LED headlights of other BMW models the F01/F02 LCI daytime driving lights and the low-beam headlight are generated from a lens projection system in the LED arrays.



TE12-0365

F01/F02 LCI LED arrays of the LED headlight

F01/F02 LCI General Vehicle Electronics

5. Exterior Lights

Index	Explanation
1	LED arrays with free-form lens for basic light distribution
2	LED arrays with free-form lens for long-range lighting up to the horizontal light/dark boundary
3	LED array with optics module for long-range lighting of outer area (asymmetry)
4	LED array with optics module for the generation of the horizontal light/dark boundary
5	Headlight lens

Each headlight cluster incorporates five LED arrays with high-performance LEDs for the low-beam headlight and other LEDs for daytime driving lights. Each LED array generates a partial light intensity of the low-beam headlight. Special optics modules are located between the LED array and the headlight lens.

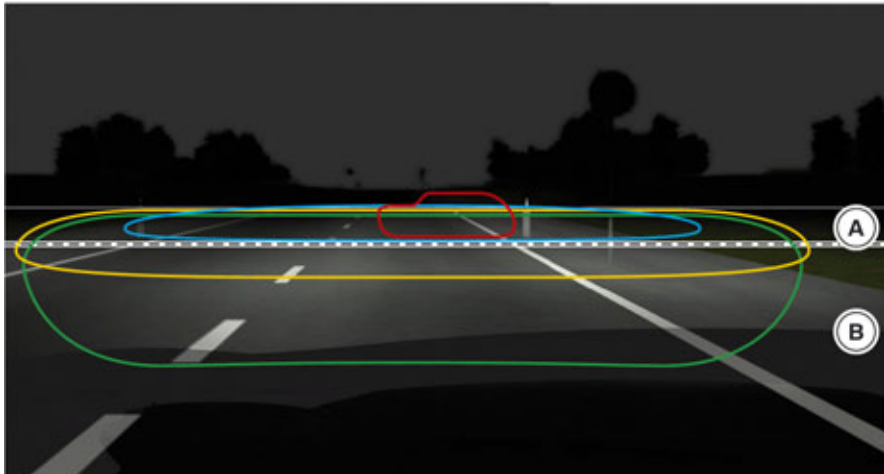
The upper LED arrays are used for basic light distribution and light up over the near field to near the horizontal light/dark boundary. The lower LED arrays are used for long-range illumination up to the horizontal light/dark boundary. The two centrally arranged LED arrays have special optics modules. The inner LED array generates the light/dark boundary and the outer the asymmetrical range of the low-beam headlight.

The light distribution for the low-beam headlight arises through the superimposition of these partial light ranges.

The following graphic shows the light distribution of the LED arrays.

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5. Exterior Lights



F01/F02 LCI light distribution of the LED arrays of the LED headlight

Index	Explanation
A	Area up to the horizontal light/dark boundary roughly 60 m (197 ft) away
B	Near field up to roughly 20 m (65.6 ft) away
1	LED arrays for basic light distribution
2	LED arrays for long-range lighting up to the horizontal light/dark boundary
3	LED array for the generation of the horizontal light/dark boundary
4	LED array for the illumination of the asymmetrical range

The light of the upper LED arrays is used for basic light distribution. The light illuminates the near field symmetrically and extends to near the light/dark boundary. The near field starts roughly 8 to 10 m (26 to 33 ft) in front of the vehicle and extends up to roughly 20 m (65.6 ft) away.

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5. Exterior Lights

The lower LED arrays are used for long-range lighting up to the horizontal light/dark boundary to roughly 60 m (197 ft) away. Their light superimposes parts in the near field and illuminates the area up to the horizontal light/dark boundary symmetrically.

The horizontal light/dark boundary between the lower bright area of the road illumination and the upper dark area arises from the superimposition with the light of the centrally arranged LED arrays of the inner LED arrays.

The centrally arranged LED array of the outer LED arrays generates the asymmetrical area of the low-beam headlight by the noticeable fresnel optics in the headlight lens. It illuminates the outer area of the roadway with an increased range.

The cornering light is always switched on dimmed to the low-beam headlight.

Daytime driving lights

For daytime driving lights the daytime driving lights LEDs in the LED arrays and the LEDs of the low-beam headlight are switched on dimmed. In addition, the positioning lights light up. The positioning light, together with the turn indicator, is installed in the LED headlight and can be replaced.

High-beam headlight

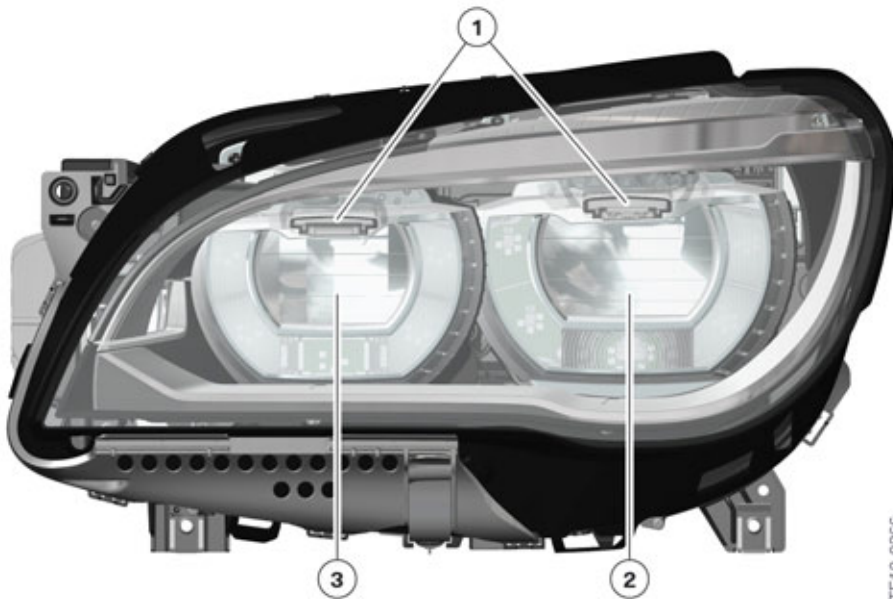


F01/F02 LCI high-beam headlight of the LED headlight

Similar to the LED headlights of other BMW models, the high-beam headlight is generated via a reflection system. In contrast to the LED headlights of other BMW models, both reflectors of the headlight are used for the high-beam headlight in the F01/F02 LCI.

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5. Exterior Lights



F01/F02 LCI high-beam headlight of the LED headlight

Index	Explanation
1	LED arrays with optics module for high-beam headlight
2	Outer reflector for high-beam headlight (partial high-beam headlight, vertical light/dark boundary)
3	Inner reflector for high-beam headlight (flat illumination of the high-beam area)

The high-beam headlight arises from the superimposition of two partial areas. The outer reflector generates a vertical light/dark boundary, the partial high-beam headlight. The light distribution of this reflector is restricted inwards. The inner reflector provides flat lighting for the entire high-beam area.

Cornering light

Similar to the LED headlights of other BMW models, the cornering light is installed as an additional light source in the LED headlight and can be replaced. The cornering light supports the driver when turning, manoeuvring and parking. In addition, the cornering light is switched on dimmed to the low-beam headlight.

Side lights/Parking light and side marker light

Unlike the LED headlights of other BMW models only the positioning lights and the side marker lights are switched on for the side lights. Only the positioning light is switched on for the parking light.

The side marker light is always switched on in addition to the driving light. The LED bracket is a fixed component in the LED headlight and cannot be replaced.

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5. Exterior Lights

Positioning light and turn indicator



F01/F02 LCI turn indicator

Positioning light and turn indicator use a fiber-optic conductor, which as a positioning light is either fed by a white LED or as a turn indicator by a yellow LED group.

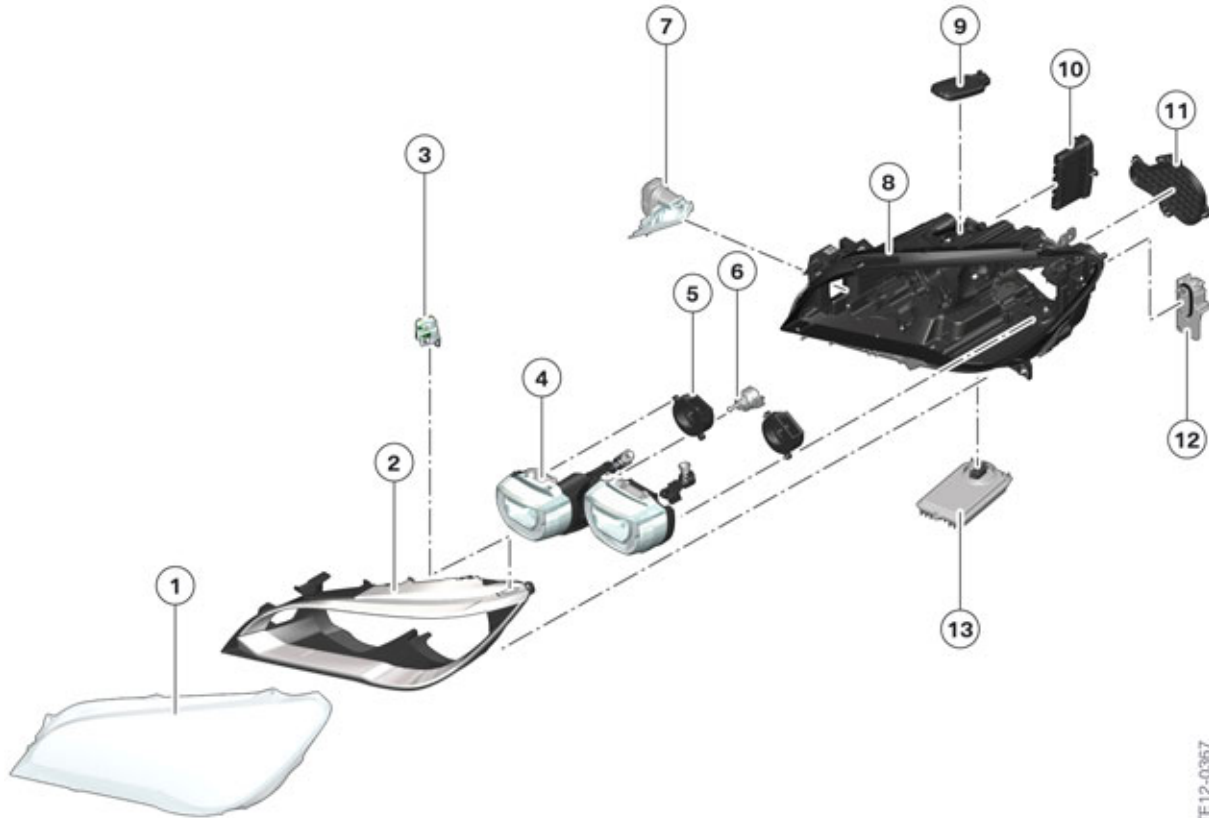
Only if the daytime driving lights are switched on, is the positioning light switched off during indicating. Otherwise the white LED of the positioning light also remains switched on during indicating.

The LED module for the turn indicator and the positioning light is installed in the LED headlight and can be replaced.

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5. Exterior Lights

5.2.2. Components



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F01/F02 LCI components of the LED headlight

Index	Explanation
1	Lens
2	Cover frame with inner frame and fiber-optic conductor for turn indicator and positioning light/side lights
3	LED module for side marker light
4	LED main light components
5	Fan
6	LWR stepper motor
7	Cornering light LED module
8	Headlight housing
9	Cover at top (inner fan)
10	Headlight driver module (STML / STMR)
11	Rear cover (outer fan, LWR stepper motor)
12	LED module for turn indicator and positioning light/side lights
13	LED main light module (LHML / LHMR)

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5. Exterior Lights

The following components are replaceable:

- Fan
- LWR stepper motor
- Cornering light LED module
- LED module for turn indicator and positioning light/side lights
- Headlight driver module (STML / STMR)
- LED main light module (LHML / LHMR)

The headlight driver module STML / STMR and the LED main light module LHML/LHMR must be coded for the vehicle. Always follow proper repair instructions.



As with all BMW headlight systems, its imperative that all components be aligned properly using adequate equipment and repair procedure (please follow proper repair instructions).

5.3. Turn indicator



F01/F02 LCI turn indicator in exterior mirror

The additional turn indicator is integrated in the exterior mirror.

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6. Interior Lighting

The components of the interior lighting in the front roof area are integrated in the roof function center (FZD), as well as above in the sun visors. The footwell lighting is located on the bottom of the dashboard. Voltage is supplied to the rear interior lighting via the roof function center (FZD). The footwell module (FRM) is the central control unit for the interior lighting.



F01/F02 LCI ambient room lighting, rear

The bulbs of the standard footwell lights are replaced with LEDs.

The scope of the optional equipment ambient light (optional equipment 4UR) has been extended and the function complemented with a color selection. Additional footwell lights on the driver and front passenger side, as well as B-column lighting, increase the effect of the ambient room lighting.

Ambient lighting includes:

- Door pocket lighting, front and rear
- Backrest rear panel lighting
- Entrance lighting
- Lighting of the storage compartment in the rear center armrest
- Footwell lighting, driver and front passenger side
- B-column lighting, driver and front passenger side.

All LED lights with the exception of the floor lights, the power windows switch lighting, the entrance lighting, as well as the illuminated storage compartments in the front center console and in the rear center armrest are designed as optional two-color LEDs (orange/white). The driver can set the col-

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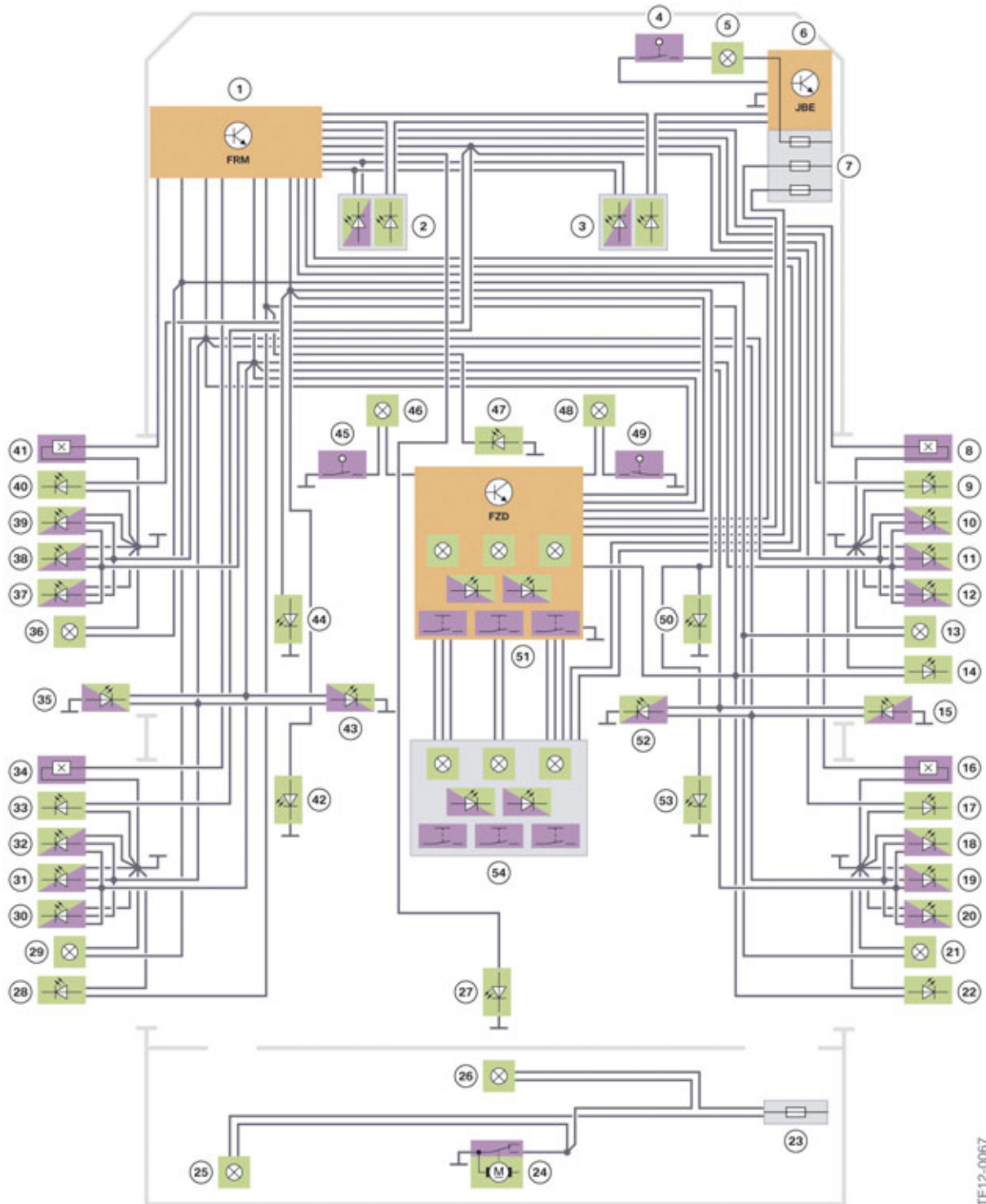
6. Interior Lighting

or and brightness of the ambient lighting via the central information display (CID). He can choose between BMW Classic (orange) and BMW Modern (white), whereby the white light enhances the ambience at nighttime.

F01/F02 LCI General Vehicle Electronics

6. Interior Lighting

6.1. System wiring diagram



F01/F02 LCI system wiring diagram for interior lighting

TE12-0067

F01/F02 LCI General Vehicle Electronics

6. Interior Lighting

Index	Explanation
1	Footwell module (FRM)
2	Footwell light and footwell lighting ¹ , driver's side
3	Footwell light and footwell lighting ¹ , front passenger side
4	Contact glove box
5	Glove box light
6	Junction box electronics JBE
7	Power distribution box, junction box
8	Door contact, front passenger side
9	Ground lights, front passenger side
10	Door area lighting ² , front passenger side
11	Inner door handle lighting ² , front passenger side
12	Door pocket lighting ¹ , front passenger side
13	Entrance lighting, front passenger side
14	Power window switch lighting, front passenger side
15	B-column lighting ¹ , front passenger side
16	Door contact, rear passenger side
17	Floor lights, rear passenger side
18	Door area lighting ² , rear passenger side
19	Inner door handle lighting ² , rear passenger side
20	Door pocket lighting ¹ , rear passenger side
21	Entrance lighting, rear passenger side
22	Power window switch lighting, rear passenger side
23	Power distribution box, luggage compartment
24	Trunk lid contact with trunk lid lock
25	Luggage compartment light trunk lid
26	Luggage compartment light
27	Lighting for storage compartment, rear center arm rest ¹
28	Power window switch lighting, rear driver's side
29	Entrance lighting ¹ , rear driver's side
30	Door pocket lighting ¹ , rear driver's side
31	Inner door handle lighting ² , rear driver's side
32	Door area lighting ² , rear driver's side

F01/F02 LCI General Vehicle Electronics

6. Interior Lighting

Index	Explanation
33	Floor lights driver's side, rear
34	Door contact, driver's side, rear
35	B-column lighting ¹ , driver's side
36	Entrance lighting, front driver's side
37	Door pocket lighting ¹ , front driver's side
38	Inner door handle lighting ² , front driver's side
39	Door area lighting ² , front driver's side
40	Floor lights, front driver's side
41	Door contact, front driver's side
42	Entrance lighting ¹ , rear driver's side
43	Backrest rear panel lighting ¹ , driver's seat
44	Entrance lighting ¹ , front driver's side
45	Vanity mirror light switch on front driver's side
46	Vanity mirror light on front driver's side
47	Front center console storage compartment lighting
48	Vanity mirror light on front passenger side
49	Switch for vanity mirror light on front passenger side
50	Entrance lighting ¹ , front passenger side
51	Roof function center FZD with ambient light ²
52	Backrest rear panel lighting ¹ , front passenger seat
53	Entrance lighting ¹ , rear passenger side
54	Rear inner/reading light unit with ambient light ²

¹ Only for optional equipment ambient light (optional equipment 4UR).

² Two-color ambient light for optional equipment ambient light (optional equipment 4UR).



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